

SECTION 2.00 GENERAL PROVISIONS

2.01 GENERAL

All construction shall conform to the requirements and dimensions on the construction plans, City Standard Details, the Code of Ordinances of the City of Asheville, or as stated in these specifications. The design of streets, water systems, storm drainage systems, and grading plans shall be signed and sealed by a Professional Engineer, **Professional** Land Surveyor, Architect or Landscape Architect licensed in accordance with Chapter 89 of the N.C. General Statutes.

2.02 QUALITY OF MATERIALS

It is the intent of this specification to provide materials of the highest standard known to the trade and to provide materials free from defects in workmanship and product. Equal or superior materials and/or equipment not specified may be used provided proper documentation and samples necessary for the City Engineer to determine their acceptability and **ISSUE A WRITTEN APPROVAL** are provided to him/her a **MINIMUM** of 14 DAYS before being brought onto the construction site. Current specifications and/or the latest revisions shall apply in all cases where materials are described by these specifications.

2.03 INSPECTIONS

The Contractor shall provide the necessary personnel and equipment required as a part of the inspection process. The presence of the City Engineer or Inspector at the work site shall in no way lessen the Contractor's responsibility for conformity with the plans and specifications. Should the City Engineer or Inspector accept materials, or work that does not conform with plans and specifications, whether from lack of discovery or for any other reason, it shall in no way prevent later rejection or corrections to the unsatisfactory materials or work when discovered. The Contractor shall have no claim for losses suffered due to any necessary removals or repairs resulting from the unsatisfactory work. Any work which has been covered without the Inspector's approval, shall, at the Inspector's request, be uncovered and be made available for inspection at the Contractor's expense. Work performed before or after City staff's normal work hours or during the weekend or City **Holidays must be approved in advance by the City Engineer or their designee** and shall comply with the City Code and shall include only such tasks that do not require observation by an Inspector.

2.04 CLEARING AND GRUBBING

The work of clearing and grubbing shall consist of the cutting, removal, and satisfactory disposal of all vegetation and all surface debris.

Clearing and grubbing shall be conducted in a manner to prevent damage to vegetation that is intended to remain growing and also to prevent damage to adjacent property.

2.05 EARTHWORK

Earthwork shall be defined as removal of earth or soft rock from its natural location or as the depositing of such material into the proper fill areas as designated on the plans.

Rock excavation shall be defined, in the opinion of the City Engineer, as all ledge rock or boulders over 0.5 cubic yard that cannot be excavated without blasting.

A written PERMIT FOR BLASTING must be obtained from the Asheville Fire Department a MINIMUM of 24 hours before any explosive material or blasting agents are used or stored within the Corporate Limits of the City of Asheville.

Fill Material shall be free from construction material, debris, frozen material, organic matter, unstable material, or contaminated soils. For the top two feet below finished subgrade, no fill material shall be used weighing less than 100 pounds per cubic foot. The top TWO FEET of backfill material shall be free from stones greater than 2 inches.

For all areas under a proposed roadway, the top twelve (12) inches of subbase, and the entire base course shall be compacted to a density of 100 PERCENT maximum Standard Proctor dry density as determined by AASHTO method T99. For that portion of fill under roadways and extending at a slope of 1 to 1 beyond the back of curb, compact to a density of NO LESS THAN 95 PERCENT of the maximum Standard Proctor dry density as determined by AASHTO method T99. Fill material shall be placed in lifts of 6 inches or less of uncompacted soil.

Other fill material shall be compacted to a density of NO LESS THAN 90 PERCENT of the maximum Standard Proctor dry density as determined by AASHTO method T99. Backfill material shall be placed in lifts of 8 inches or less of uncompacted soil.

2.06 MAINTENANCE OF TRAFFIC

A. General

When construction occurs in a traffic zone, traffic control devices must be erected, maintained, relocated, and removed in accordance with the plans, specifications, NCDOT Supplement to the MUTCD, or MUTCD. This requirement shall apply for all construction occurring on public streets, and right of way including construction or repairs by utility companies. The MUTCD referred to in this provision shall be the current edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, as prepared by the National Advisory Committee on Uniform Traffic Control Devices, including all standard documents referred to in Section 1A-7 of the MUTCD. The current edition shall be the edition current at the time of construction.

Traffic control devices shall include but not be limited to signs, drums, barricades, cones, delineators, flashing arrow panels, temporary guardrail, temporary concrete median barrier, vehicle-mounted temporary impact attenuators, pavement marking, raised reflective pavement markers, flaggers and pilot vehicles.

Notification of all emergency service agencies must occur prior to beginning construction. These agencies consist of the Asheville Fire Department, Asheville Police Department Communications Division, Buncombe County Sheriffs Department, and Buncombe County Emergency Services Division.

B. Materials

Unless otherwise required, materials used in the fabrication and installation of construction traffic control devices shall be in accordance with the applicable provisions of the MUTCD.

All enclosed lens (Engineers Grade) sheeting required for use on traffic control devices shall have an identification mark on the surface. This mark signifies that the sheeting meets the requirements of Federal Specification L-S-300C for Minimum Reflectivity 1 Sheeting and Tape. The identification mark shall not interfere with the function of the device, but shall be visible both day and under illumination at night without the use of special devices.

C. Installation and Maintenance

Existing public streets or highways shall be kept open to traffic at all times by the Contractor unless permission to close the street, or portions thereof, is granted by the **City Engineer**, the Fire Chief, NCDOT's Division Traffic Engineer, **and/or a designated representative**, a minimum of 48 hours prior to any closing or partial closing. The City of Asheville Communications Division of the Police Department must be contacted BY THE CONTRACTOR A MINIMUM OF 24 HOURS before any streets or sidewalks are closed or partially closed.

Work on any project shall not start until all traffic control devices required for the particular work activity are properly installed.

Traffic control devices shall be properly maintained, relocated as necessary, cleaned and operated during the time they are in use. During periods when use of the devices is not warranted, they shall be removed from the work area, covered, or otherwise positioned so that they do not convey their message to the traveling public.

The location, legends, sheeting, dimension, number of supports, and horizontal and vertical placement of warning signs, barricades, and other traffic control devices shall be as required by the approved plans or the MUTCD.

Weeds, brush, trees, construction materials, equipment, etc. shall not be allowed to obscure any traffic control device in use.

Competent and properly trained, attired and equipped flaggers, using "stop" and "slow" paddles shall be provided when two-way traffic cannot be maintained or as determined by the City Traffic Engineer or Construction Inspector.

The Contractor shall assume full responsibility for the continuous and expeditious maintenance or replacement of all construction warning signs, barricades, and other traffic control devices. The Contractor shall continuously review and maintain all traffic control measures to assure that adequate provisions have been made for the safety of the public and workers. Failure to maintain all traffic control devices in a satisfactory condition shall be cause for suspension of construction operations until proper traffic control is re-established.

2.07 CONCRETE

Concrete shall be only plant-mixed or transit-mixed concrete conforming to

ASTM C33 for aggregates and to ASTM C94 for ready-mixed concrete. Any concrete poured that has a slump over 4 inches as per ASTM C143, or has a batched time of more than 90 minutes, will be considered unacceptable. Concrete shall not be deposited on frozen subgrade. Concrete shall not be poured when the air temperature is 40 degrees Fahrenheit or below, and the predicted low temperature for the succeeding 24 hour period is less than 32 degrees Fahrenheit.

All concrete when placed in the forms shall have a temperature of between 50 and 90 degrees Fahrenheit and shall be maintained at a temperature of not less than 50 degrees Fahrenheit for at least 72 hours for normal concrete and 24 hours for high early strength concrete, or for as much time as is necessary to secure proper rate of curing and designed compressive strength.

Concrete shall be air entrained with 5-7% air. Retarders and accelerators shall be used only as directed by the City Engineer.

2.08 PERMITS

During the course of designing, and prior to construction of a utility or street project, all necessary permits from the City, State, or Federal Government must be obtained.

CITY PERMITS

- 1) Grading Permit - A Grading Permit is required whenever the denuded area on a project is to be 1,000 square feet or greater. A Grading Permit may be issued after plans are approved and prior to any grading or site work. The Grading Permit is issued by the Engineering Department. **If the proposed project disturbs 10,000 square feet or greater, four (4) copies of Erosion Control Plans for the project shall be turned into the City at the time of site plan submittal.** A Grading Permit shall not be required on City, County, State or Federal construction projects; however, a land quality permit may be required from the **NCDENR Land Quality Section.**
- 2) Driveway Permit - A driveway entrance permit is required prior to the construction or modification of all driveways or connections within the right of way of a City or State maintained street. The driveway shall be indicated on the plot plan and shall conform to City and/or State Standards. The permit application may be obtained from the City's Permitting Center **if the**

driveway is on a City street. In the event the driveway is on a State maintained street refer to State Permits 3) c) of this section.

- 3) Open Burning Permit - An Open Burning Permit is required a minimum of 24 hours prior to open burning. This permit is obtained from the Fire Department for a fee, and is available only for open burning of cleared vegetation and certain other natural materials. Open burning of construction or demolition debris is prohibited.
- 4) Blasting Permit - A Blasting Permit is required any time there is to be transportation, use or storage of explosive materials. This permit is required a minimum of 24 hours in advance of any blasting operations and can be obtained from the Fire Department for a fee.
- 5) City of Asheville Encroachment Agreement - An Encroachment Agreement shall be obtained from the Public Works Department for any **temporary or permanent encroachments into the City's right-of-way.**
- 6) Street Cut Permit - A Street Cut Permit shall be obtained from the Engineering Department for all utility cuts, sidewalk modification, utility pole locations/installations/borings, trenching, roadway widening, curb and gutter, and storm drainage connections to the City storm drainage system. All repairs proposed for construction shall be in conformance with the City of Asheville Standard Specifications and Details. A fee will be charged for this permit for the field inspection. **In the event that the street cut is on a state road, an encroachment agreement is required from NCDOT.**
- 7) Stormwater Discharge Permit - A Stormwater Discharge Permit is required for all proposed development greater than five (5) acres or having a proposed impervious surface on completion of greater than 50 percent of the total acreage in the development. The application and permit may be obtained from the Engineering Department.
- 8) Certificate of Appropriateness from Historic Resources Commission - A Certificate of Appropriateness from the Historic Resources Commission is required for various types of work

done in all local historic districts at the City of Asheville.

- 9) **Water System Extension - In order to initiate a request for water service or a request for the extension of water lines, an "Availability Request" must be submitted by the Developer or authorized representative to the Engineering Department, along with payment of the necessary fee amount. For all public water line extensions, a Water Main Extension Permit from the City of Asheville Engineering Department must be obtained. For all private water line extensions, a North Carolina Department of Environment and Natural Resources, Division of Environmental Health must be obtained. Application forms may be obtained from the City or NCDENR. There is a \$200 plan review fee. The PE's certification must be received by the City, prior to the water system being used for functional fire protection and/or water service.**

STATE PERMITS

Application for State Permits are to be submitted to the City as indicated below. Any fees required should be made payable to the State agency involved and submitted at the same time as the application. It is the responsibility of the Owner/Developer to ensure all permit applications, fees, and final plans are submitted to the Permitting Center, after City Council and/or Staff approval for submittal to the appropriate State Agency. All applicable permits **MUST BE OBTAINED PRIOR TO ANY CONSTRUCTION.**

- 1) Sanitary Sewer System Extension - For any proposed extension or connection of collection systems to the public sanitary sewer system or the construction of a privately maintained sanitary sewer collection system, approval of the plans and acceptance of flow and treatment allocation must be received from the Metropolitan Sewerage District. A Non-Discharge Permit from the **MSD** must be obtained. Additionally, all project submittals should be handled directly from the applicant to these agencies.
- 2) Water System Extension - In order to initiate a request for water service or a request for the extension of water lines, an "Availability Request" must be submitted by the Developer or authorized representative to the Engineering Department, along with payment of the necessary fee

amount. For all public water line extensions, a Water Main Extension Permit from the City of Asheville Engineering Department must be obtained. For all private water line extensions, a North Carolina Department of Environment and Natural Resources, Division of Environmental Health must be obtained. Application forms may be obtained from the City or NCDENR. **There is a \$200 plan review fee.** The PE's certification must be received by the City, prior to the water system being used for functional fire protection and/or water service.

- 3) North Carolina Department of Transportation Encroachment Forms and Driveway Permit - When any part of the project will encroach on NCDOT right of way, an encroachment form must be submitted and approved by NCDOT prior to construction. All encroachment applications and driveway permits require five (5) sets of plans and five (5) copies of the encroachment form. Fee schedules and encroachment forms are available from the NCDOT.
 - a) For installation of utilities a 3-party agreement between the developer, the City of Asheville and the NCDOT is required. There is no fee.
 - b) For roadway widening, sidewalk installation, addition of curb and gutter, storm drainage, etc., a 2-party agreement between the developer and the NCDOT is required. The fee is determined by the NCDOT.
 - c) Driveway Permits must be obtained prior to any driveway cuts to be made on a State maintained road. The driveway permit request shall be completed and turned into the Permitting Center for review and following approval will be forwarded to NCDOT by the City Traffic Engineer. The fee is determined by the NCDOT. For work other than site work and utility installations, additional permits may be required by the City of Asheville Building Safety Department or NCDOT.

2.09 ACCEPTANCE PROCEDURES

All improvements intended for public maintenance are eligible for acceptance by the City of Asheville following the procedures outlined below:

- After the installation of improvements in accordance with approved plans

and Asheville Standard Specifications and Details, the Owner/Developer or designee shall contact the Engineering Department and schedule a completion (final) inspection.

- The Engineering Department will accept the improvements or respond with a punch list within 30 days of the request.
- The Owner/Developer or designee must complete all items indicated on the punch list, and any additional items noted, within 60 days or the punch list will be void. The Owner/Developer or designee must then request another completion (final) inspection.
- Upon the acceptable completion of all punch list items and payment of any outstanding fees, the Owner/Developer or designee will receive an acceptance letter from the City of Asheville Engineering Department. This acceptance begins a warranty for materials and workmanship for two (2) years from the date of acceptance. All pavement repairs must be warranted for a period of two (2) years. The warranty will be to the City from the Owner/Developer or designee. The City will perform routine maintenance during the warranty period.
- Upon completion of, or just prior to the end of, the warranty period, the Owner/Developer or designee shall request a final inspection from the Engineering Department.
- The Engineering Department will respond with final acceptance or a punch list on workmanship or materials within 30 days of the request.
- The Owner/Developer or designee must complete all items indicated on the punch list, and any additional items noted within 60 days or the punch list will be void. The Owner/Developer or designee must then request another final inspection.
- **Upon the acceptable completion of all punch list items, the Owner/Developer or designee will receive a letter indicating the date the acceptance request will be presented to City Council for final acceptance. Following City Council's acceptance, the Owner/Developer or designee will receive a letter of official acceptance from the City. The City will begin maintenance the date of the final acceptance letter. Until a letter of final acceptance has been issued, all materials and workmanship are the responsibility of the Owner/Developer.**

2.10 PLANTINGS WITHIN CITY UTILITY EASEMENTS

An "easement" shall mean any area to which the City has unlimited access for servicing utility lines. Any plantings installed within an easement may be damaged or destroyed during the course of servicing. The City is not liable for damage to any improvements or plantings within an easement. The City will reseed as necessary any bare or disturbed soil for erosion control purposes.

Small and medium shrubs, groundcovers, or grasses may be planted within an easement. Small trees (under 30 feet in height at maturity) may be planted a minimum of 10 feet from the centerline of the closest pipeline within the easement or 10 feet from the center of the easement, whichever is greater. Small trees as defined above shall include redbuds, fringe tree, serviceberry, crape myrtle, golden raintree, hawthorne, hornbeam, saucer or star magnolia, sassafras, smoke tree, sourwood or sumac. Large trees shall not be placed within any City utility easement.

It should be pointed out that plantings on any easement under the rights of another utility (e.g. Metropolitan Sewerage District, Carolina Power and Light Company, Bell South, PSNC, Intermedia, etc.) must be approved in advance by the utility company and shall comply with their standards.

2.11 LICENSE REQUIREMENTS

All contractors performing any construction activity involving the City of Asheville utility system or street system shall be licensed to practice contracting in the State of North Carolina. The contractor shall be classified in the appropriate area of license for the type construction to be performed and shall not perform construction activity which exceeds the limitations of the designated contractor's license.

Additionally, every contractor doing business in the City of Asheville shall have a current City Privilege License. A Privilege License may be obtained from the Finance Department Collections Division.

2.12 RETAINING WALLS

All retaining walls with a height of five (5) feet or greater must be designed by either an architect or professional engineer and shall be signed and sealed. The design of retaining walls within the public right of way shall be submitted to the Engineering Department for approval prior to construction. Any retaining wall meeting the height criteria listed herein and located on

private property shall be submitted to the Building Safety Department and must comply with the State Building Code requirements. All necessary permits (e.g. building permit) must be obtained prior to any construction associated with the retaining wall.

2.13 OSHA STANDARDS

All contractors and their employees must comply with all NC OSHA standards while working on City projects and while on City of Asheville property or rights of way.

2.14 SAFETY AND HEALTH HAZARDS

The operations of any City contractor shall not expose City of Asheville employees to any hazardous chemicals or other occupational safety and health hazards. All contractors working on City projects or on City of Asheville property shall inform the project engineer concerning hazardous chemicals which the contractor might be using and to which City employees might become exposed by working in that area. The contractor shall also advise the City of the appropriate control measures to be used by the City employees to prevent exposure and to minimize risk of exposure.

Flammable or combustible liquids shall be stored, handled, or used on the construction site in accordance with the applicable provisions of NFPA 30 "Flammable and Combustible Liquids Code"; NFPA 58 "Standard for the Storage and Handling of Liquefied Petroleum Gases"; and NFPA 395 "Standard for the Storage of Flammable and Combustible Liquids on Farms and Isolated Construction Projects".

Contractors that anticipate use or storage of any hazardous material at a project site are required to consult with the Life Safety Division staff of the Asheville Fire Department prior to any on-site use or storage.

2.15 BRIDGES

All vehicular and pedestrian bridges must be designed by a N. C. Professional Engineer and must be properly signed and sealed. The design must be submitted to the Engineering Department for approval prior to construction. All necessary permits (e.g. those required by the U.S. Army Corps of Engineers) must be obtained prior to construction. Vehicular bridges shall be designed to meet or exceed HS-20 highway loading requirements.

END OF SECTION 2.00